

SCIENCE & GOVERNMENT REPORT

25th Year of Publication

The Independent Bulletin of Science Policy

Volume XXV, No. 16

P. O. Box 6226A, Washington, D. C. 20015

© October 15, 1995

Missing in the Funding Fight: Scientific Leadership

The whispered lament in Washington science-policy circles is that no effective champions, scientific or political, have emerged to resist the fiscal beating that Congress is inflicting on the national research enterprise.

The President's Science and Technology Advisor, John Gibbons, has gone political far more than any of his predecessors by publicly deploring the mangling of civilian R&D budgets by Congressional Republicans. By virtue of his office and long service in Washington, Gibbons is a major figure in the scientific community, which often and warmly hears him corroborate its own faith in the importance of research. But Gibbons' preachings have failed to slow the Republicans, which is understandable, or rouse the languid Democrats on Capitol Hill, who should know better. The mainstream press, in its unappealable ratings of what's important, rarely carries his message to the public.

President Clinton's failure to say a good word about science has engendered bitterness among the mandarins, who regard a ceremonial nod by the President as not only pleasant,

ment that pays obeisance to deficit reduction and respectfully prays for sensitivity to the needs and importance of science. The statement deservedly sank without a trace. However, the Board, consisting of 24 high achievers in science, engineering, industry, etc., could easily bring the money issue to public attention.

All the Board needs to do is declare that ignorant, shortsighted Congressional majorities are blighting the American research enterprise, and warn that the citizenry will pay a woeful price for these ill-advised, penny-pinching depredations.

Accompany that declaration with a "Grave Digger of Science Award" for an especially benighted legislator (to be chosen by the Board), and the science establishment would probably find an attentive press, an interested public, and

(Continued on Page 2)

Environmental Hissing Match—P. 3 Clinton Creates Bioethics Body—P. 5

but politically valuable. Gibbons's office has lately been beating the drums about Clinton personally bestowing the National Medals of Science at a ceremony on October 18. Recalling that last year, the President dropped out on short notice and turned the awards ceremony over to Vice President Gore, a White House science staffer told SGR that Presidential participation this time is being heavily advertised to lessen the likelihood of another default.

In the major government agencies that support research, the top people have generally responded to the fiscal threat by publicly praising research, but otherwise suffering in silence and hoping for a miracle. Neal Lane, Director of the National Science Foundation, plays the theme that NSF has always enjoyed bipartisan support and still does.

Having come out of the budget process with only a minor reduction, NSF feels well treated, though it has been stretched thin by several years of skimpy funding and broadened responsibilities. Its new budget is down a bit in dollars, and even more so when inflation is factored in. Nonetheless, there is no desire to stir up Republicans, like Science Committee Chairman Robert Walker, who proclaim themselves friends of science, even as they vote for budget plans that call for a 33 percent reduction in science and technology appropriations by the year 2002.

The National Science Board, NSF's supposedly independent policymaking body, has issued a thin-gruel of a state-

In Brief

The rare good fortune of a budget increase in this grim season could be slipping away from the National Institutes of Health, which, like the rest of the government, is running on a continuing resolution because of Congressional delays in passing money bills. In the meantime, NIH spending, though boosted by the House, is restrained at last year's level, less five percent. However, the NIH bill, packaged with education and labor, is bogged down in inter-party squabbling, leading to widespread speculation of deadlock. The estimated effect for biomedical research: about \$600 million less than last year's budget.

Congressional terminators are trying to move ahead with their lethal designs on the Commerce Department, homebase of the National Institute of Standards and Technology and the National Oceanic and Atmospheric Administration. But some of the more reflective members have doubts about shifting NIST's labs to NSF and selling off the Weather Service, as proposed in the Department of Commerce Dismantling Act (HR 1756), which Clinton promises to veto.

Meanwhile, NIST has responded to Congressional elimination of funds for its Advanced Technology Program by dishing out new rounds of awards, with optimistically declared durations of five years.

Backing off from his previous interest in a US Department of Science as a refuge for surviving science agencies from zapped cabinet departments, House Science Chairman Robert Walker now proposes creation of a US Science and Technology Administration. With the White House opposed to a science reorganization, and Congress far behind in passing money bills, the latest Walker plan is going nowhere.

... Petitions Urge Politics to Be Kind to Research

(Continued from Page 1)

second thoughts in the ranks of Congress.

The same opportunity exists for the senior advisory body in the federal research enterprise, the President's Committee of Advisors on Science and Technology (PCAST), another group of distinguished outsiders in service to government. But it, too, speaks softly—in public. Last month, PCAST wrote to the President, House Speaker Gingrich, and Senate Majority Leader Dole, acknowledging awareness of "budget realities," but urging strong support for science and technology.

The letters were accompanied by a PCAST Statement of Principles echoing many previous declarations, from various quarters, about the value of research and science education, the need for stable funding, and so forth. It is not known whether the President or the two Congressional leaders have actually seen the PCAST correspondence. But it's doubtful. And if they did read it, they wouldn't be any wiser from such old, predictable stuff.

As the research agency closest to the fears and hopes of the American people, the National Institutes of Health is uniquely supported by a broad alliance of health organizations, disease lobbies, financially dependent medical schools, and doting members of Congress. Starting with this strong backing, NIH has also employed political craft and public education in its quest for support. But the old magic may be losing power in the present political atmosphere.

While the House voted a surprisingly large budget increase for NIH—5.7 percent—the Senate voted a mere 2.7 percent increase. The final figure, which remains to be settled, is likely to be closer to the lower number. Given the harsh statistics of NIH award rates, the ingredients for heart-wrenching public appeals are readily at hand in medical research. But as the budget process grinds on in Congress, the biomedical-research establishment is performing well mainly in talking to itself. The obvious messages of missed and delayed opportunities and needless suffering are not widely broadcast.

As a Nobel laureate and Director of NIH, Harold Varmus is ideally situated to enlighten the American public about the probable consequences of more or less money for, say, cancer research. Discretion, of course, must be employed, since federal employees are not supposed to wade into politics. Nonetheless, the opportunities for publicly exposing the effects of Congressional maltreatment of science are numerous—but unexploited by the government's own research leaders.

As the high temple of American science, the National Academy of Sciences, a private institution with close ties to government, is well-positioned for assailing the Republican Revolution's impact on the federal research establishment, including, in particular, the severely beaten environmental sciences. The Academy, however, appears to be disengaged from Washington's political turmoil. NAS President Bruce

Alberts is, by his own proud description, obsessed with improving science and math education. This interest, he says, is not to the exclusion of other matters, but it does heavily occupy his attention.

The Academy could take lessons in political involvement from the American Association for the Advancement of Science, which alertly monitors the budget confusion on Capitol Hill, and reports back to the scientific community. Last June, the AAAS staged a big meeting in Washington, under the title "Unity Under Adversity," which provided Presidential Advisor Gibbons with a platform for depicting the Republican Congress as an enemy of science. Having shed its traditional torpor, the AAAS is tending toward the kind of lobbying for all of science that has long benefited the biomedical-research sector. But the movement is slow and cautious, and could collide with Republican hostility to politicking by non-profits.

The National Academy of Engineering, companion to the Academy of Sciences, inaugurated a new President last month, Harold Liebowitz, who unexpectedly won office over the opposition of the NAE's old-boy inner circle. Liebowitz says he wants to enlarge the NAE's role in Washington affairs and claims to be moving toward that goal. The only reasonable assessment at this point is that it's too early to tell.

But, echoing a sentiment that is prevalent in Washington's science-policy community, a former White House Science Advisor recently told SGR that the two Academy heads leave much to be desired for coping with the fiscal and political problems confronting science and technology. Like others who share such sentiments about the Academy presidencies, as well as other high posts in Washington, he accompanied his dour assessment with "Don't quote me."

If carried out—and it could be—the seven-year Budget Resolution passed by Congress in May would severely shrink the national scientific enterprise, from the government's own labs to universities, health centers, and other research institutions throughout the country.

The lesson that remains to be learned is that polite petitions that cite history and appeal to reason will not suffice against a political movement fixated on deficit reduction, regardless of the real costs.—DSG

© 1995, Science & Government Report, Inc.

Editor and Publisher

Daniel S. Greenberg

Associate Publisher

Wanda J. Reif

Circulation Manager

Glen D. Grant

Published by Science & Government Report, Inc., twice monthly, except once each in January, July, August, and September. Annual subscriptions: Institutions, \$490.00 (two years, \$840.00). Bulk and individual rates upon request. Editorial offices at 3736 Kanawha St. NW, Washington, DC 20015. Tel. (202) 244-4135. For subscription service: PO Box 6226A, Washington, DC 20015. Tel. 1-800-522-1970; in Washington, DC 785-5054. Reproduction without permission is prohibited. SGR is available on University Microfilms International. Claims for missing back issues will be filled without charge if made within six weeks of publication date. ISSN 0048-9581.

Gore and Congressman Trade Environmental Insults

Environmental politics descended into the polemical pits last week, with Vice President Al Gore and Rep. Dana Rohrabacher, a far-right California Republican, exchanging insults and nasty accusations.

Gore accused Republican leaders of "conducting a *jihad*" against environmental protection, and said Rohrabacher employs the "old Stalinist approach to science." Rohrabacher said Gore wears a "stormtrooper uniform" and said "his far-left allies are environmental bullies."

An environmental enthusiast from way back, Gore collides with the Congressman in the latter's capacity as Chairman of the Energy and Environment Subcommittee of the House Science Committee. In Rohrabacher's stated opinion, the dominant school of environmentalism is based on phony science and hysterical misrepresentations to the public, and Al Gore is the dean in charge. Gore and company say the attack on environmental science is an excuse for caving in to industrial interests.

The acrid verbiage was part of the seesaw battle under way in the capital on the scope and rigor of federal environmental legislation. The opening legislative rounds went to the Republicans, as they voted to abolish the National Biological Service, cut the budget of the Environmental Protection Agency and open restricted federal lands to oil drilling and timber cutting.

After a slow start, a shrewdly planned counterattack from the White House effectively pictured the Republicans as hostile to prudent environmental values and bent on permitting commercial exploitation of the nation's environmental birthright. With major legislative items still in mid-stream, and the White House threatening a veto or two, the final rounds are yet to be played out. But, as the Administration has turned up the emotional heat, the Republican leadership, criticized by some of its own moderates, has recently eased up on its previously ambitious drive against environmental regulation.

Superfund changes opposed by mainstream environmental organizations have slipped on the legislative agenda, and Speaker Gingrich has turned cool toward legislation that would narrow protections in the Endangered Species Act.

Part of the ongoing environment battle, the Gore-Rohrabacher spitting match was touched off by nasty remarks that the Congressman made about the Vice President on September 20 at hearings before his subcommittee [SGR, October 1: "Republicans Open Attack on Environmental Science"].

Billed as the first in a series of hearings under the umbrella title "Scientific Integrity and Public Trust: The Science Behind Federal Policies and Mandates," the subject of the day was "Stratospheric Ozone: Myths and Realities." Chairman Rohrabacher commenced with a barrage of disdain for Al Gore (who, of course, was not present), accusing him, the Administration, and the science establishment of exaggerating the risks of ozone depletion, and suppressing

S&T Immigration Rises

The flow of foreign scientists and engineers into the US on "temporary" work visas hit a record high last year, according to an unofficial estimate presented to a Congressional hearing on the increasingly volatile topic of skilled immigrants.

In the fiscal year that ended September 30, 81,306 such visas were issued for scientists and engineers, an increase of 15,834 from the previous year, according to David North, who testified September 28 to the Immigration Subcommittee of the Senate Judiciary Committee. North is a former US Labor Department official and author of a recent book, *Soothing the Establishment: The Impact of Foreign-Born Scientists and Engineers on America* (University Press, Lanham, Md.).

Based on data from the US Immigration and Naturalization Service, he said, last year's increase was concentrated in engineering admissions, which rose by nearly 12,000 to a total of 55,449. Visas in the computer and math category totaled 11,186, down about 1000, while visas in the natural sciences totaled 9423, up by 5248. "Temporary," he said, can stretch to six years.

the views of scientists who disagree. To remedy the alleged blackout, Rohrabacher said, he would receive testimony from scientists on both sides of what he deemed to be a controversy about the health risks of ozone depletion.

The witness for the White House, Robert T. Watson, environment chief in the Office of Science and Technology Policy, insisted that there's only one side to the issue, and that doubts about the risks of ozone depletion are confined to a small minority with a scant track record in relevant research.

Gore picked up on this theme October 5 in a meeting with a small group of reporters, attended by EPA Administrator Carol Browner and Kathleen McGinty, Chair of the Council on Environmental Quality. As reported by the Associated Press, Gore said Rohrabacher's championing of the minority view on ozone recalled "the old Stalinist approach to science where you try to silence the people who are real scientists and lift up the fringe element."

Accusing the Congressional Republican leadership of "conducting a *jihad* on the environment in the most right-wing agenda we have seen in America in this century," Gore said President Clinton would use the veto to "fight off this *jihad* item by item."

Rohrabacher's response was out the next day, in a press release titled "Gore Should Abandon Environmental Fanaticism." Noting that he invited testimony on both sides of the ozone issue, Rohrabacher said that Gore "is the one wearing the stormtrooper uniform. Stalinists used the power of government to intimidate those who had differing views. That's exactly what the Vice President and other extremists are doing with their name calling and intimidation."

House Votes a Political Prop for Shaky Space Station

The House has expressed a seemingly stout vote of confidence in the Space Station, passing by unanimous voice a seven-year authorization for the project.

But the reality of space economics is a widening gap between NASA's bankroll and programs, with virtually no prospect of budget growth in the coming years. Nonetheless, the Space Station is locked into the budget by prior act of Congress under a lofty cap of \$2.1 billion a year. The newly adopted authorization would maintain that figure. Cap, of course, suggests frugality, but in addition to that supposedly maximum figure, there's some \$3 billion a year for the Space Shuttle, which is the workhorse for delivering construction materials and crews for building the Station.

In 1992, when the space budget totaled \$17.5 billion, long-term plans called for \$22 billion at the end of the decade. Then austerity struck, and NASA is now down to \$14.5 billion, and fated for \$13 billion by 2002 under the Republicans' budget-balancing plan. The future figures make no allowance for inflation, but they provide that same \$2.1 billion a year cap for the Space Station.

Despite NASA's sinking budget, the Space Station has become politically inviolable as the biggest chunk of pork in the federal larder. Contracts are spread nationwide, but are heavily concentrated in California, Texas, and Florida, all crucial in presidential politics. Add in Alabama, and the four states get 86 percent of Space Station spending. Neither the White House nor the Congressional leadership wants to take the rap for killing the project.

But the grim arithmetic of the space budget cannot be

ignored, which is why the Space Station's friends, led by House Science Committee Chairman Robert Walker (R-Pa.), pushed through the authorization bill. The vote, on September 28, was hailed by Walker as a solid commitment to carry the project to completion. But it's actually a good deal less than that, even if duplicated in the Senate, which is busy with other matters.

Authorizations amount to nothing more than a statement of intention, which Congress can finance or not, as it chooses. Many projects are authorized but never financed and some are financed without authorizing legislating, as was the case with the ill-fated Superconducting Super Collider. The Space Station, in fact, has come this far without an authorization.

As Chairman of an authorizing committee, Walker understandably extols the value of authorizations. In the case of the Space Station, he says it will serve as a reminder of Congressional intent and as a framework for appropriations. But the unspoken fear in the Space Station camp is that as other parts of NASA are sacrificed to pay the costs, resentment will increase and votes will turn against the project.

The Clinton Administration has sought to reinforce support by bringing the Russians aboard and thus adding a foreign-policy rationale to the Space Station. But even as the Russians have become intimately involved in the project, the original European partners are wobbling in their commitments.

The Space Station is safe for the new fiscal year, with big margins of support in both houses. But everyone involved knows that NASA can't go on like this.

Job Changes & Appointments

Samuel M. Rankin III has been appointed Director of the Washington Office of the American Mathematical Society. He succeeds **Ivar Stakold**, who has returned to the University of Delaware. Reflecting the fiscal-political worries prevalent in all sentient scientific societies, the 30,000-member AMS—representing a profession especially hard hit by PhD unemployment—said Rankin “will oversee a variety of AMS projects aimed at raising awareness of mathematics within the federal government and the general public. He will facilitate advocacy for strong support of mathematical sciences research.”

Gerald F. Wheeler, Professor of Physics at Montana State University and Director of the University's Science/Math Resource Center, has been appointed Executive Director of the National Science Teachers Association, succeeding **Bill Aldridge**, who retired recently after 15 years in the post. Based in Washington, the Association has over 52,000 members, mostly school teachers and administrators. As political concern about the low state of science and math education has sprouted in recent years, the Association and its own reform efforts have gained attention in the capital.

Suzanne W. Hadley, a senior government investigator in several prominent scientific-misconduct cases in recent years,

last week joined the faculty of the George Washington University School of Medicine under the Intergovernmental Personnel Act, which supports staff exchanges between the federal and private sectors. Hadley, a psychologist formerly at the National Institute of Mental Health (NIMH), served as an investigator for the National Institutes of Health and later was on prolonged loan to Rep. John Dingell's investigative subcommittee. Since the Republicans took control of Congress and most of its staffing slots, Hadley has been in a dispute with NIH over her next assignment. At GW Medical School, she will be Director of the Program on Biomedical Innovation and Accountability in the Center for Neuroscience, Behavior, and Society. The Center is headed by **Frederick K. Goodwin**, former Director of NIMH.

Louis Laurent, formerly with the Launch Directorate of the French space agency, has been appointed Space Attache at the French Embassy in Washington, succeeding **Bernard Luciani**, who has returned to Paris, where he will be a representative to the European Space Agency.

Dan Longo, a senior researcher and administrator at the National Cancer Institute's Frederick Cancer Research and Development Center, has been appointed Scientific Director of the National Institute on Aging. The post had been filled on an acting basis by **Edward G. Lakatta** since **George R. Martin** left last year to join Fibrogen, Inc., Palo Alto, Calif.

Clinton Creates National Bioethics Commission

A huge, presumably definitive report covering government-sponsored human radiation experiments was released October 3, and President Clinton used the occasion to announce creation of a National Bioethics Advisory Commission.

The weighty volume, essentially a history of the interplay between Cold War nuclear health anxieties and biomedical ethics, provided an appropriate platform for the President's announcement. Many experiments that today would be deemed intolerable are recounted in its pages. But with the federal government in a general retreat on the national landscape, the President emphasized that the Commission is merely an advisory body.

Established by Executive Order, with a membership of up to 15 still to be named, the Commission can

Final Report: Advisory Commission on Human Radiation Experiments (GPO Stock No. 061-000-00-848-9; 925 pp., \$44). Order from: New Publications, Superintendent of Documents, PO Box 371954, Pittsburgh, Pa. 15250-7974; tel. 202/512-1800; fax 202/512-2250.

Scheduled for publication in a few weeks, a companion volume: *Sources and Documentation*, "a finding aid" to materials examined by the Commission.

inquire and recommend, with its advice going to the White House National Science and Technology Council and "other appropriate government entities." The public visibility and influence of the Commission will depend on its membership, particularly its chairperson. But it is plainly not designed to be conspicuous.

As its "first priority," the Executive Order states, the Commission will focus on the "protection of the rights and welfare of human research subjects; and issues in the management and use of genetic information, including but not limited to human gene patenting."

On the face of it, the Commission looks like another ho-hum committee buried deep in the federal bureaucracy and responsible for obscure matters. But bioethics has become inextricably entangled in abortion, experimentation on embryos, and other volatilities of reproductive politics. When the Commission comes into being, it will be watched carefully by the new regime in Congress and its politically alert friends on the far right.

The most influential predecessor of Clinton's new creation, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, was established in 1973 at the behest of Senator Edward Kennedy, then Capitol Hill's dominant figure in health-related matters. The Commission, which expired in 1978, was highly effective in elevating concerns

about ethical standards. Various pale successors lingered on until 1983, but since then, no national body has held responsibility for surveying and advising on bioethics and associated matters. A Congressional Bioethics Board of outside specialists, established in 1985, met only once and expired without a trace in 1989.

From Clinton's choice of an Executive Order to establish the Commission, it may be inferred the White House saw no possibility of taking the legislative route, which, if successful, would have endowed the Commission with greater stature.

The big volume on the history of radiation experiments, and the forthcoming accompanying volume on sources and documents, is intended to tell the whole story of a clouded but obviously repulsive chapter in American science. For over two decades, scraps of disturbing information have been coming out about cavalier radiation experiments on unwitting healthy and ailing subjects, including prisoners, retarded persons, and others who, in these enlightened times, are considered incapable of meaningful informed consent.

As stated in the *Final Report*, the impetus for the review was a series of articles in November 1993 in the *Albuquerque Tribune* that for the first time "publicly revealed the names of Americans who had been injected with plutonium"—thus "putting a human face to what had previously been anonymous data published in official reports and technical journals."

On January 15, 1994, the White House announced creation of the Advisory Committee on Human Radiation Experiments, a 14-member body, consisting of scientists, physicians, and lawyers, chaired by Ruth R. Faden, Director of the Bioethics Institute, Johns Hopkins University. At the first meeting, April 21, 1994, the preface to the report states, President Clinton "urged us to be fair, thorough, and unafraid to shine the light of truth on this hidden and poorly understood aspect of our nation's past. Our most important task, he said, was to tell the full story to the American people."

The result, in an astonishingly short time, is an impressive history combining facts with analyses of ethical standards then and now. The volume also contains recommendations, sympathetically received by Clinton, for making amends to surviving victims of indefensible experiments, and strengthening current ethical standards.

Clinton's embrace of the report is sure to frost the old guard in the nuclear-weapons establishment, already under siege by Energy Secretary Hazel O'Leary. The egregious events discussed in the *Final Report* all preceded the arrival of the President and his Energy Secretary. To the extent that the public notices, they reap credit for exposing the secret sins of government. It's a win-win situation, very rare these days in Washington.

NSF Chief: 'Going to Be Rocky for a Couple of Years'

The mood of budget pessimism and long-term hope at the top of the science-policy pyramid in Washington was displayed last week at a press briefing by Neal Lane, Director of the National Science Foundation. Following are excerpts from the discussion that followed Lane's forecast of tight research funding for some time to come, with comments by NSF Deputy Director Anne C. Petersen—transcribed and condensed by SGR, but essentially verbatim.

Q. Have you been instructed from above not to expect budget growth for some time?

Lane. I've not been told so explicitly. I can't remember any single person, however, telling me that I might anticipate budget growth. My belief is that it is going to be rocky for a couple of years. I would like to believe that we will, in fact, decide, when we're able, to increase our investment in science and technology, and that would include the kinds of things that NSF supports. I'm sort of cautiously optimistic that that is in the cards, in the long term. But there's no data I can point to to suggest that that's a good speculation.

Q. Some things will have to be cut. Specifically, what looks more important and less important at this stage?

Lane. I can't tell you by field. Within fields, each of the Assistant Directors will be able to say, this is a really hot area. I just had a presentation [to the National Science Board, NSF's policymaking body] of Bose-Einstein condensation. An exciting development. And there are many others. So, in every field, there's exciting science going on.

Along a disciplinary line, I just can't give you an answer to that. I think we have increased our attention to interdisciplinary activities, and I would expect us to continue to do that, because the science is rich, and when it's ready, in time, then we want to be sure that it gets done. We also continue to focus on partnerships, of all kinds [with the private sector and other government agencies]. And so, when we see an opportunity to do that, we'll do it.

We have talked more about the integration of research and education and how to work with the universities that are trying to cope with changing times. So, when we get a good idea, or we receive a good proposal, we will invest there. It's a complex set of issues to wrestle with, and whatever we do, we'll use our merit review, peer-evaluation program to try to make good determinations.

Q. Does it seem certain now that some programs will be lopped off or reduced to meet the reduction in the budget?

Lane. If you look retrospectively, you can find such examples. And the Assistant Directors, working with their Division Directors, are looking at exactly that question now. I think the answer is yes. I can't tell you in advance what they will be, but I know from our discussions, yes, we will be able to identify programs that, often because they've done what they were supposed to do, but for whatever reason, will be cut back, and other programs will be expanded.

Q. The House recommended that you drop one director-

NSF Budget: The Growth is Gone

The House and Senate have spoken, but have not yet settled their differences. The story so far, in billions:

	Latest budget ('95)	House ('96)	Senate
	\$ 3.264	\$ 3.160	\$ 3.200
Research	2.280	2.254	2.294
Education	.606	.599	.599

ate [of NSF's seven disciplinary directorates].

Lane. It's in the authorization language. It makes sense for us to look at our whole organization. But we don't view that in terms of reducing by one directorate. In the spirit of "reinventing government," it is appropriate for us to look at the whole structure, and decide, do we need seven, do we need six, five? It's an opportunity to do that. In terms of the specific language, it doesn't really look like we're going to get an authorization bill out of Congress this year.

Q. Even without the bill, the message was clear, and it was particularly directed at the division of social, behavioral and economic sciences.

Lane. We've had a number of discussions with the leadership in Congress about this issue and, I think, done quite a good job of explaining what it is we're supporting in the social, behavioral, and economic sciences; why it's important; why it's probably more integrated with other areas of science and engineering than might be apparent. And we'll continue to have those kinds of discussions. But we certainly have no intention of eliminating important fields of science from our portfolio.

Q. But in the absence of an authorization bill, will you continue with the same number of directorates?

Lane. While we're looking at a possible new organization, we'll make no immediate change in the structure. We'll stay with the same number of directorates and the same titles as we have now. But I want to emphasize that we are going to look at the organization.

Q. In view of what's happening with other federal agencies, there's talk about more "proposal pressure" on NSF, because your budget seems to be doing relatively well.

Lane. I would expect to see it. I would say we have not yet seen it. We are concerned that as research support decreases in other agencies, that scientists and engineers will increasingly look to us for support. It's a serious issue.

Petersen. Proposal pressure does fluctuate within particular areas, from year to year. And some of it is in response to program announcements. Separating that out from what might be responses to talk of cuts in other fields is difficult. We did have some increase in, for example, biology and some aspects of the social and behavioral sciences when there was a lot of talk of the NIH budget really being cut dramatically. And that was early on. But now that has abated. There's a great deal of wariness, a wait-and-see, among the community.

In Print

(Continued from Page 8)

From the American Enterprise Institute (AEI):

Agricultural Policy Reform in the United States (289 pp., \$39.95 cloth, \$19.95 paper), policy papers on a broad range of agricultural issues, including research—for which a major recommendation, coming from a leading conservative think tank, surprisingly states: "A significant increase in federal funding, or federal government action to stimulate increased funding by state government or industry, seems to be warranted." The call for more research money, plus revamped priorities, less Congressional intervention, and more competition for grants, appears in a chapter titled "Revitalizing R&D," by Julian M. Alston, Professor of Agricultural Economics, UC Davis, and Philip G. Pardey, Research Fellow, International Food Policy Research Institute, and Associate Professor, University of Minnesota. The collection was edited by Daniel A. Sumner, Professor of Agricultural Economics, UC Davis, as part of an eight-volume AEI series on agriculture. Coming later this year, a volume by Alston and Pardey: *Making Science Pay: The Economics of Agricultural R&D Policy*.

Order from: Publishers Resources, Inc. 1224 Heil Quaker Blvd., LaVerne, Tenn. 37086; tel. 1-800/269-6267; fax 1-800/774-6733.

From the National Health Council (NHC):

Health Groups in Washington: A Directory, (13th edition, 230 pp.; \$25 for members of organizations in the NHC, \$32.50 for others), staffers' names and contact information for some 800 non-governmental health groups based in the capital, mainly to keep an eye on health politics. The NHC is the umbrella for many national health organizations, including the American Cancer Society and the Arthritis Foundation. Council President Joseph Isaacs describes the directory as "a valuable networking tool for health and government relations professionals" and "indispensable for building coalitions."

Order from: National Health Council, 1730 M St. NW, Suite 500, Washington, DC 20036-4505; tel. 202/785-3910; fax 202/785-5923.

From the General Accounting Office (GAO), no charge:

Efforts to Complete Advanced Battery Development Will Require More Time and Funding (GAO/RCED-95-234; 44 pp.), says problems and money have piled up at the Advanced Battery Consortium, an electric-propulsion alliance of Chrysler, Ford, and GM, with 50-percent cost sharing and managerial guidance by the Department of Energy. The GAO reports that from 1991 through March 1995, the Consortium spent only half of the \$262 million initially planned for that period. The long-term goal of a battery fully competitive with gasoline does not appear feasible at this point, the report says. In the interim, the goal is a 100-mile range, criticized by the GAO as uncompetitive and over budget. Consortium funds survived in DOE's 1996 budget.

Health Research Misconduct: HHS' Handling of Cases Is Appropriate, but Timeliness Remains a Concern (GAO/HEHS-95-134; 21 pp.), based on a sample of 10 investigations by the Office of Research Integrity, GAO reports that ORI investigators are employing "appropriate techniques," but the process is slow, and 45 of 80 cases remained open for over six months. The report, requested by Senators Kassebaum, Cohen, and Pryor, states that Congressional concerns about federal spending on "inappropriate research practices" have "heightened after widely publicized reports of research fraud and other scientific misconduct, such as the recent detection of falsified data in federally funded breast cancer research."

Federal Research: Lessons Learned from the Pilot Technology Access Program (GAO/RCED-95-212; 62 pp.), reports favorably on five centers, established by the Small Business Administration in 1992 in Maryland, Missouri, Pennsylvania, Texas, and Wisconsin, to provide training and research assistance for small businesses.

Order from: USGAO, PO Box 6015, Gaithersburg, Md. 20884-6015; tel. 202/512-6000; fax 301/258-4066.

From NASA and the University of Maryland:

What Is the Value of Space Exploration? (40 pp., no charge), proceedings of a symposium in July 1994, sponsored by NASA's Office of Space Science and the U. of Md. Among the 25 speakers: Carl Sagan, Roald Sagdeev, Richard Garwin, Steven J. Gould, and Daniel Goldin.

Order from: University of Maryland, East-West Space Science Center, 3367 A.V. Williams Building, College Park, Md. 20742; tel. 301/405-8052; fax 301/405-9966.

Correction: The telephone number was incomplete in SGR October 1 for ordering an NIH report, *The Threshold of Discovery: Future Directions for Research on Aging* (360 pp., no charge): the number is: 1/800-222-2225.

To Order or Renew

Science & Government Report
Northwest Station, Box 6226A
Washington, D.C. 20015

☐ Renew my subscription ☐ Enter my subscription

Institutional subscribers: one year, \$490.00 ☐
two years, \$840.00 ☐

Non-USA airmail, \$40.00 per year; non-USA surface
mail, \$20.00 per year additional

☐ Check enclosed ☐ Please Bill
Please charge to: ☐ MasterCard ☐ VISA

Account# _____ Exp. date _____

Signature _____
Name _____

Address _____
Zip _____

Toll-Free Subscription Service: 1-800-522-1970
In Wash., D.C.: 785-5054 / FAX: (202) 362-2790

In Print

Official reports and other publications of special interest to the research community

(Copies of publications listed here are available from the indicated sources—not from SGR)

From the Council of Chief State School Officers:

State Indicators of Science and Mathematics Education 1995: State-by-State Trends and New Indicators from the 1993-94 School Year (74 pp., \$18), third in a biennial series by the Council, based on data from the US Department of Education, financed by NSF, reports test results (generally upward), race and gender differentials, teacher preparation, classroom hours, etc. The "indicators" approach, covering all the states and several non-state jurisdictions, reflects political and public interest in quantifying the quality of public education. For scientists involved in programs to improve education, the report provides useful benchmarks.

Order from: Council of Chief State School Officers, State Education Assessment Center, One Massachusetts Ave. NW, Suite 700, Washington, DC 20001-1431; tel. 202/408-5505; fax 202/408-8072.

From the Organization for Economic Cooperation and Development (OECD):

Impacts of National Technology Programs (107 pp., \$42), says data are sparse, methodologies uncertain, and assessments of impacts questionable for government programs "to promote industrial technology and competitiveness"—as exemplified by Europe's EUREKA, the UK's Alvey, and programs in US Department of Energy and other agencies. The report, by Martin Brown, of OECD's Directorate for Science, Technology and Industry, concludes that "identifiable R&D programs are very difficult to evaluate."

Order from: OECD Publications and Information Center, 2001 L St. NW, Suite 650, Washington, DC 20036-4910; tel. 202/785-6323; fax 202/785-0350; also available from bookshops and OECD offices in major cities around the world.

From the National Academy of Sciences (NAS):

Colleges of Agriculture at the Land Grant Universities: A Profile (144 pp., \$34.95, plus \$4 for shipping), the first report from an ongoing major NAS study on agricultural education, outlines the history of the Land Grant system and provides data on enrollments, finances, degrees awarded, etc. A second report, with conclusions and policy recommendations, is scheduled for publication in mid-1996. The study, financed by the Department of Agriculture and the Academy, was produced by the NAS Committee on the Future of the Colleges of Agriculture in the Land Grant University System, chaired by Anthony S. Earl, of the Quarles and Brady Law Firm, Madison, Wisconsin. Nicole Ballenger of the NAS staff served as Project Director.

Order from: National Academy Press, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 1-800/624-6242 or 202/334-3313.

From the Academy's Space Studies Board, no charge: Managing the Space Sciences (about 100 pp., available at the end of October), response to a request from NASA Administrator Daniel Goldin for advice on how to manage NASA science. Answer: with a light touch, as indicated by the rejection of proposals to establish a National Institute for Space Science, akin to NIH. The report calls for strengthening the role of NASA Chief Scientist—not so much for managing the sciences as for protecting them—and for openness and clarity in developing priorities. The report was produced by an NAS Space Science "steering group" chaired by John A. Armstrong, a retired IBM executive. Marc S. Allen of the NAS staff was Study Director.

A Scientific Assessment of a New Technology Orbital Telescope (75 pp.), reports favorably on a potential peace dividend in a leftover from the Strategic Defense Initiative—"an agile, ultra-lightweight, 4-meter space telescope, equipped with an advanced active-optics system." With plans and some components for the \$300-million project inherited by SDI's successor, the Ballistic Missile Defense Organization, the Academy, in response to a request for an assessment, set up a Task Force on BMDO New Technology Orbital Observatory, chaired by Michael F. A'Hearn, of the University of Maryland. Conclusion: the technology could be scientifically useful, in a replay of the happy convergence of military and civilian goals in the recent Clementine lunar orbiter. The Task Force wrote that the technology may never fly, but "if this report does nothing more than illuminate some of the capabilities lurking in the shadows of the Cold War, it will have achieved something worthwhile."

Order from: National Academy of Sciences, Space Studies Board, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 202/334-3477; fax 202/334-3701.

From the late Congressional Office of Technology Assessment (OTA):

Bringing Health Care Online: The Role of Information Technologies (GPO Stock No. 052-003-01433-5; 240 pp., \$15), says information technologies in health-care settings have mainly developed in individual departments, with relatively little broadscale integration. But, OTA says, within the next decade, systems will come together and improve health-care delivery practices and reduce the cost of services.

Reducing Earthquake Losses (GPO Stock No. 052-003-01431-9; 176 pp., \$12), warns that the US is more vulnerable to earthquake damage than is generally realized, and should go further in applying existing knowledge to reducing damage and injuries and expand research in this area.

Note: These reports were released on the eve of OTA's official expiration, September 30. The Congressional close-down order for OTA allowed a small crew to complete and issue reports still in progress. Titles and availability will be reported as they appear.

Order from: New Publications, Superintendent of Documents, PO Box 371954, Pittsburgh, Pa. 15250-7974; tel. 202/512-1800; fax 202/512-2250. For Internet access to OTA documents: <WWW:http://www.ota.gov>.

(Continued on Page 7)

